Author Index

Ahmed, E., see Basily, I.K., 153
Alves, S.S.
– and Figueiredo, J.L.
Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions, 37
Arrendale, R.F., see Schlotzhauer, W.S., 25
Ayache, J.
– and Oberlin, A.
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329

Bach, G., see Shevel'kova, L.V., 201
Baltes, W., see Tschiersky, H., 91
Basily, I.K., Ahmed, E., and Nashed, N.
Factors affecting the yields produced from the two-stage pyrolysis of Egyptian bitumen, 153
Boon, J.J., see Pouwels, A.D., 97
Borchers, G., see Köll, P., 319
Budzikiewicz, H., see Lattimer, R.P., 237

Chortyk, O.T., see Schlotzhauer, W.S., 25

Daugherty, K.E., see Jaradat, Q.M., 169

Ericsson, I.
– and Ljunggren, L.
Trace determination of high molecular weight polyvinylpyrrolidone by pyrolysis–gas chromatography, 251
Evans, J.O., see Valcarce, R.V., 5

Figueiredo, J.L., see Alves, S.S., 37
Fujimura, Y., see Mitsui, T., 83
Fujimura, Y., see Hida, M., 181 371
Funazukuri, T.
–, Hudgins, R.R., and Silveston, P.L.
Production of olefins from flash pyrolysis of cellulose-containing material, 47

Gusel'nikov, L.E., see Shevel'kova, L.V., 201

Hatim, Z., see Maury, F., 67
Hempfling, R.
–, Schulten, H.-R., and Horn, R.
Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis–mass spectrometry, 275
Hida, M., see Mitsui, T., 83
Hida, M.
–, Mitsui, T., and Fujimura, Y.
Curie-point pyrolysis–gas chromatography of aliphatic amines in the presence of metal powder and inorganic salt, 181
Hida, M.
–, Mitsui, T., and Fujimura, Y.
Effect of adding metal powder and inorganic salt to a pyrolysis foil on selective pyrolysis of phenyl alkylamines by Curie-point pyrolysis–gas chromatography, 371
Horn, R., see Hempfling, R., 275
Hudgins, R.R., see Funazukuri, T., 47

Ishiwatari, M.
–, Sakashita, H., Tatsumi, T., and Tominaga, H.-O.
Organic sulphur compounds produced by flash pyrolysis of Timhadit oil shale, 217

Jaradat, Q.M.
–, Saleh, F.Y., Lewis, R.V., Daugherty, K.E., and Rice, J.A.
Characterization of refuse-derived fuel by pyrolysis–gas chromatography and gas chromatography/mass spectrometry, 169

Kitamura, M., see Tanaka, K., 143
Kleiner, V.I., see Zaikin, V.G., 291
Kloster, G.
– and Reisinger, K.
Laboratory scale pyrolysis experiments using halogenated benzenes, 357
Köll, P.
–, Borchers, G., and Metzger, J.O.
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
Krentsel, B.A., see Zaikin, V.G., 291

Lattimer, R.P.
–, Muenster, H., and Budzikiewicz, H.
Pyrolysis tandem mass spectrometry (Py–MS/MS) of a segmented polyurethane, 237
Lee, J.-C.
Mathematical model for reduction of coke

formation during hydrocarbon pyrolysis on a surface coated with carbonate, 189
Lewis, R.V., see Jaradat, Q.M., 169
Ljunggren, L., see Ericsson, I., 251

Mardanov, R.G., see Zaikin, V.G., 291
Maury, F.
–, Hatim, Z., Reynes, A., and Morancho, R.
Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y: H films OMCVD process, 67
Metzger, J.O., see Köll, P., 319
Mitsui, T.
–, Hida, M., and Fujimura, Y.
Determination of alkaloidal narcotics by pyrolysis–gas chromatography, 83
Mitsui, T., see Hida, M., 181, 371
Morancho, R., see Maury, F., 67
Muenster, H., see Lattimer, R.P., 237

Nashed, N., see Basily, I.K., 153

Oberlin, A., see Ayache, J., 329
Önen, A.
– and Sarac, A.S.
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227

Pan, W.-P.
– and Richards, G.N.
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261
Platé, N.A., see Zaikin, V.G., 291
Pouwels, A.D.
– and Boon, J.J.
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97

Reisinger, K., see Kloster, G., 357
Reunanen, M., see Sjöström, J., 305
Reynes, A., see Maury, F., 67
Rice, J.A., see Jaradat, Q.M., 169
Richards, G.N., see Pan, W.-P., 261

Sakashita, H., see Ishiwatari, M., 217
Saleh, F.Y., see Jaradat, Q.M., 169
Sarac, A.S., see Önen, A., 227
Schlotzhauer, W.S.
–, Arrendale, R.F., Severson, R.F., and Chortyk, O.T.
Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf, 25
Schulten, H.-R., see Hempfling, R., 275
Severson, R.F., see Schlotzhauer, W.S., 25
Shevel'kova, L.V.
–, Vedeneeva, L.M., Gusel'nikov, L.E., Bach, G., Zychlinksi, W., and Zimmermann, G.
On the mechanism of inhibition–initiation during pyrolysis of hydrocarbon mixtures, 201
Silveston, P.L., see Funazukuri, T., 47
Sjöström, J.
– and Reunanen, M.
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Smith, G.G., see Valcarce, R.V., 5
Snyder, A.P.
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127

Tanaka, K.
–, Yamashita, S., Kitamura, M., and Yamabe, T.
Electronic structures of models for alkylene–aromatic polymers and their pyrolysis products, 143
Tatsumi, T., see Ishiwatari, M., 217
Tominaga, H.-O., see Ishiwatari, M., 217
Torell, J.M., see Valcarce, R.V., 5
Tschiersky, H.
– and Baltes, W.
Curie-point pyrolysis and gas chromatography/mass spectrometry of 5,5′ oxydimethylenebis(2-furfural), 91

Valcarce, R.V.
–, Smith, G.G., Torell, J.M., and Evans, J.O.
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recongition 5
Vedeneeva, L.M., see Shevel'kova, L.V., 201

Windig, W.W.
Guest Editorial, 283

Yamabe, T., see Tanaka, K., 143
Yamashita, S., see Tanaka, K., 143

Zaikin, V.G.
–, Mardanov, R.G., Kleiner, V.I., Krentsel, B.A., and Platé, N.A.
Pyrolysis–gas chromatographic/mass spectrometric behaviour of polyvinylcyclohexane and vinylcyclohexane–styrene copolymers, 291
Zimmermann, G., see Shevel'kova, L.V., 201
Zychlinski, W., see Shevel'kova, L.V., 201

Subject Index

Acetylation
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Acetylene
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Acrylate isomers
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127
Agricultural soils
Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis– mass spectrometry, 275
Aliphatic amines
Curie-point pyrolysis–gas chromatography of aliphatic amines in the presence of metal powder and inorganic salt, 181
Alkaloidal narcotics
Determination of alkaloidal narcotics by pyrolysis–gas chromatography, 83
Alkylene–aromatic polymers
Electronic structures of models for alkylene–aromatic polymers and their pyrolysis products, 143
Anhydrosugars
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
Anthracene
Electronic structures of models for alkylene–aromatic polymers and their pyrolysis products, 143
Asphaltites
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227
Atmospheric pressure chemical ionization
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127

Beech wood
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Bitumens
Factors affecting the yields produced from the two-stage pyrolysis of Egyptian bitumen, 153
Botryococcus braunii
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Butadiene
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Butyl methacrylate isomers
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127

Carbohydrates
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Carbonization
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Catagenesis
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Cellulose
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions, 37
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261

Chemical ionization
Pyrolysis tandem mass spectrometry (Py–MS/MS) of a segmented polyurethane, 237
Chemometrics
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5
Chitin
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
Chlorolignin
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Coke formation
Mathematical model for reduction of coke formation during hydrocarbon pyrolysis on a surface coated with carbonate, 189
Compaction
Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis–mass spectrometry, 275
Copolymers
Pyrolysis–gas chromatographic/mass spectrometric behaviour of polyvinylcyclohexane and vinylcyclohexane–styrene copolymers, 291
Curie-point pyrolysis
Curie-point pyrolysis and gas chromatography/mass spectrometry of 5,5′-oxydimethylenebis(2-furfural), 91
Curie-point pyrolysis–gas chromatography of aliphatic amines in the presence of metal powder and inorganic salt, 181
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5
Effect of adding metal powder and inorganic salt to a pyrolysis foil on selective pyrolysis of phenyl alkylamines by Curie-point pyrolysis–gas chromatography, 371
Cuticular waxes
Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf, 25

Desorption chemical ionisation
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97

Euphorbia cyparissias L
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5
Eurphorbia esula L
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5

Fast atom bombardment–mass spectrometry
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
First-order reactions
Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions, 37
Flash pyrolysis
Organic sulphur compounds produced by flash pyrolysis of Timhadit oil shale, 217
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Fossil fuels
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227
Fourier transform infrared spectrometry
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261

Gas chromatography
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Characterization of refuse-derived fuel by pyrolysis–gas chromatography and gas chromatography/mass spectrometry, 169
Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf, 25
Curie-point pyrolysis and gas chromatography/mass spectrometry of 5,5′-oxydimethylenebis(2-furfural), 91
Curie-point pyrolysis–gas chromatography of aliphatic amines in the presence of metal powder and inorganic salt, 181
Determination of alkaloidal narcotics by pyrolysis–gas chromatography, 83
Effect of adding metal powder and inorganic salt to a pyrolysis foil on selective pyrolysis of phenyl alkylamines by Curie-point pyrolysis–gas chromatography, 371
Laboratory scale pyrolysis experiments using halogenated benzenes, 357
Pyrolysis of various organosilazanes used as

single precursor of SiN_xC_y:H films in OMCVD process, 67
Pyrolysis–gas chromatographic/mass spectrometric behaviour of polyvinylcyclohexane and vinylcyclohexane–styrene copolymers, 291
Trace determinaton of high molecular weight polyvinylpyrrolidone by pyrolysis–gas chromatography, 251
Groundwood pulping
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Guaiacylglycerol-β-guaiacyl ether
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305

Halogenated benzenes
Laboratory scale pyrolysis experiments using halogenated benzenes, 357
Hemicellulose
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261
Humus
Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis–mass spectrometry, 275
Hydrocarbons
Mathematical model for reduction of coke formation during hydrocarbon pyrolysis on a surface coated with carbonate, 189
On the mechanism of inhibition–initiation during pyrolysis of hydrocarbon mixtures, 201

Kerogens
Organic sulphur compounds produced by flash pyrolysis of Timhadit oil shale, 217
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Kinetics
On the mechanism of inhibition–initiation during pyrolysis of hydrocarbon mixtures, 201
Kuckersite
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329

Langmuir model
Mathematical model for reduction of coke formation during hydrocarbon pyrolysis on a surface coated with carbonate, 189
Lignin
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261
Lignite
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329

Mass spectrometry
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97
Characterization of lignin and carbohydrates dissolved in groundwood pulping by pyrolysis–gas chromatography/mass spectrometry, 305
Characterization of refuse-derived fuel by pyrolysis–gas chromatography and gas chromatography/mass spectrometry, 169
Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf, 25
Curie-point pyrolysis and gas chromatography/mass spectrometry of 5,5′-oxydimethylenebis(2-furfural), 91
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5
Laboratory scale pyrolysis experiments using halogenated benzenes, 357
Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y: H films in OMCVD process, 67
Pyrolysis–gas chromatographic/mass spectrometric behaviour of polyvinylcyclohexane and vinylcyclohexane–styrene copolymers, 291

Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis–mass spectrometry, 275
Mathematical model
Mathematical model for reduction of coke formation during hydrocarbon pyrolysis on a surface coated with carbonate, 189
Mechanical soil strength
Relevance of humus composition to the physical/mechanical stability of agricultural soils: a study by direct pyrolysis–mass spectrometry, 275
Metal powder
Curie-point pyrolysis–gas chromatography of aliphatic amines in the presence of metal powder and inorganic salt, 181
Methacrylate isomers
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127
Mineral impurities
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329

Newsprint
Production of olefins from flash pyrolysis of cellulose-containing material, 47
Nitrogen bases
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227
Nitrogen selective detector
Trace determination of high molecular weight polyvinylpyrrolidone by pyrolysis–gas chromatography, 251
Nonaqueous potentiometry
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227
Nuclear magnetic resonance
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319

Oil potential
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Oil shales
Nonaqueous potentiometry for analyses of nitrogen bases from asphaltite and oil shale pyrolysis products, 227
Organic sulphur compounds produced by flash pyrolysis of Timhadit oil shale, 217
Oils
Factors affecting the yields produced from the two-stage pyrolysis of Egyptian bitumen, 153
Olefins
Production of olefins from flash pyrolysis of cellulose-containing material, 47
OMCVD
Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y: H films in OMCVD process, 67
Organosilazanes
Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y: H films in OMCVD process, 67
Oxidation
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261
Oxidative pyrolysis
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127
5,5′-Oxydimethylenebis(2-furfural)
Curie-point pyrolysis and gas chromatography/mass spectrometry of 5,5′-oxydimethylenebis(2-furfural), 91

Pattern recognition
Differentiation of leafy spurge (*Euphorbia esula* L.) accessions based on chemical constitution using Curie-point pyrolysis–mass spectrometry–pattern recognition, 5
Phenanthrene
Electronic structures of models for alkylene–aromatic polymers and their pyrolysis products, 143
Phenyl alkylamines
Effect of adding metal powder and inorganic salt to a pyrolysis foil on selective pyrolysis of phenyl alkylamines by Curie-point pyrolysis–gas chromatography, 371
Polychlorinated biphenyls
Laboratory scale pyrolysis experiments using halogenated benzenes, 357
Polysaccharides
Preparative isolation of oligomers with a terminal anhydrosugar unit by thermal degradation of chitin and cellulose, 319
Polyvinylcyclohexane
Pyrolysis–gas chromatographic/mass spectrometric behaviour of polyvinylcyclohexane and vinylcyclohexane–styrene copolymers, 291
Polyvinylpyrrolidone
Trace determination of high molecular weight

polyvinylpyrrolidone by pyrolysis–gas chromatography, 251

Reaction kinetics
Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions, 37
Reaction mechanisms
Pyrolysis of various organosilazanes used as single precursor of SiN_xC_y: H films in OMCVD process, 67
Refuse-derived fuel
Characterization of refuse-derived fuel by pyrolysis–gas chromatography and gas chromatography/mass spectrometry, 169

Segmented polyurethanes
Pyrolysis tandem mass spectrometry (Py–MS/MS) of a segmented polyurethane, 237
Sporopollenin
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Sulphur compounds
Organic sulphur compounds produced by flash pyrolysis of Timhadit oil shale, 217

Tandem mass spectrometry
Acrylic compound characterization by oxidative pyrolysis, atmospheric pressure chemical ionization–tandem mass spectrometry, 127
Pyrolysis tandem mass spectrometry (Py–MS/MS) of a segmented polyurethane, 237
Thermal simulation
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Thermogravimetry
Kinetics of cellulose pyrolysis modelled by three consecutive first-order reactions, 37
Tobacco
Characterization of thermolysis products of cuticular wax compounds of green tobacco leaf, 25
Torbanites
Thermal simulations of the evolution of carbonaceous oil-source rocks as compared with pyrolysis of model substances of types I, II and III, 329
Trace determination
Trace determination of high molecular weight polyvinylpyrrolidone by pyrolysis–gas chromatography, 251
Two-stage pyrolysis
Factors affecting the yields produced from the two-stage pyrolysis of Egyptian bitumen, 153

Wood
Volatile products of oxidative pyrolysis of wood: influence of metal ions, 261

Xylan
Analysis of beech wood samples, its milled wood lignin and polysaccharide fractions by platinum filament pyrolysis–mass spectrometry, 97